

In the Claims

Please cancel claim 20 without prejudice.

1. (previously amended) An endovascular graft comprising an expandable stent portion and a stent cover portion, wherein the stent cover portion is coated on at least the outer surface with a bioactive agent covalently attached in the form of a thin, conformal coating in a manner sufficient to promote initial thrombus formation.
2. (cancelled)
3. (previously amended) A graft according to claim 1 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.
4. (cancelled)
5. (previously amended) A graft according to claim 1 wherein the agent is attached by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent.
6. (original) A graft according to claim 1 wherein the agent is selected from the group consisting of proteins having a specific hemostatic effect, and positively charged compounds having a nonspecific hemostatic effect.
7. (previously amended) A graft according to claim 6 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor.
8. (withdrawn) A graft according to claim 6 wherein the agent is (a) a positively charged polymeric molecule selected from the group consisting of chitosan, polylysine,

poly(ethylenimine) and acrylic polymers incorporating positively-charged groups in the form of primary, secondary, or tertiary amines or quaternary salts, or (b) a positively charged non-polymeric molecule selected from the group consisting of alkyldimethylbenzylammonium chloride and tridodecylmethylammonium chloride.

9. (previously amended) A graft according to claim 1 wherein the agent is attached to the stent cover portion in a manner that provides a) a minimal increase in overall bulk, sufficient to permit the graft to be deployed in a minimally invasive fashion, and b) a combination of coating density, coating tenacity and bioactivity sufficient to permit the coating to substantially prevent endoleaking when deployed and used *in vivo*.

10. (previously amended) An endovascular graft comprising an expandable stent portion and a porous stent cover portion selected from PET and ePTFE, the porous stent cover portion being coated with a bioactive agent comprising collagen, wherein the collagen is covalently attached in a thin, conformal coating to the porous stent cover portion in a manner sufficient to promote initial thrombus formation followed by long term fibrous tissue ingrowth, and wherein the coating is covalently attached by the activation of photoreactive groups provided by the porous stent cover portion, by the bioactive agent, and/or by a linking agent.

11. (previously amended) A method of preparing an endovascular graft comprising an expandable stent portion and a stent cover portion, comprising the step of coating at least the outer surface of the stent cover portion with a bioactive agent that is covalently attached in the form of a thin, conformal coating in a manner sufficient to promote initial thrombus formation.

12. (cancelled)

13. (previously amended) A method according to claim 11 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.

14. (cancelled)

15. (previously amended) A method according to claim 11 wherein the agent is attached by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent.

16. (previously amended) A method according to claim 11 wherein the agent is selected from the group consisting of proteins having a specific hemostatic effect, and positively charged compounds having a nonspecific hemostatic effect.

17. (previously amended) A method according to claim 16 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin, and von Willebrand factor.

18. (withdrawn) A method according to claim 16 wherein the agent is (a) a positively charged polymeric molecule selected from the group consisting of chitosan, polylysine, poly(ethylenimine) and acrylic polymers incorporating positively-charged groups in the form of primary, secondary, or tertiary amines or quaternary salts, or (b) a positively charged non-polymeric molecule selected from the group consisting of alkyldimethylbenzylammonium chloride and tridodecylmethylammonium chloride.

19. (previously amended) A method according to claim 11 wherein the agent is attached to the stent cover portion in a manner that provides a) a minimal increase in overall bulk, sufficient to permit the graft to be deployed in a minimally invasive fashion, and b) a

combination of coating density, coating tenacity and bioactivity sufficient to permit the coating to substantially prevent endoleaking when deployed and used *in vivo*.

20. (cancelled)

21. (previously amended) A method of preventing endoleaking in the course of deploying and using an endovascular graft that comprises an expandable stent portion and a stent cover, the method comprising the step of first coating the stent cover in the manner of claim 11.